

**Side-by-Side of the draft rule and the federal provisions from which most of the draft rule was drawn.**

Some changes (underline/strike and highlighted in gray) are shown to the federal provisions in the right-hand column. Not every change is marked in this way, although all changes can easily be identified by comparing the texts in the side-by-side. The changes emphasized in gray either are (a) substantive or (b) might appear substantive but are not. Please see endnotes for explanations of these changes.

Non-substantive changes are not marked.

- Substitution of terms provided for in Ch. 650: "Alaska" to "Maine", "Captain of the Port" (COTP) and "Coast Guard" to "Department of Environmental Protection" (department), "treated sewage and/or graywater" to "graywater or a mixture of graywater and blackwater".
- "NPDES permitting authority" to "department".
- "Alaska Department of Environmental Conservation" to "department".
- "applicable waters of Alaska" to "coastal waters of Maine" or "Maine coastal waters"
- "cruise vessel" to "large commercial passenger vessel"
- "Publicly owned treatment works" to "owner or operator".
- "shall not" to "may not", "shall" to "must", "shall be responsible" to "is responsible", and other minor text changes consistent with the Maine Legislative Drafting Manual.
- Section numbering changes consistent with DEP rule format template and requirements. Changed "subpart" to "chapter".
- Acronyms (ex. "SS") were written out the first time used.

DRAFT RULE	FEDERAL PROVISIONS
<p><b>Chapter 532. LARGE COMMERCIAL PASSENGER VESSELS</b></p> <p>SUMMARY: This chapter describes standards related to the discharge to coastal waters of graywater, or discharge of a mixture of blackwater and graywater, from a large commercial passenger vessel.</p> <p><b>1. Applicability.</b> This chapter applies to discharges to coastal waters of graywater and discharges of mixtures of graywater and blackwater from large commercial passenger vessels that require authorization under general permit to discharge as provided in 38 M.R.S.A. 423-D(4).</p> <p><b>2. Definitions.</b> As used in this chapter, unless the context otherwise indicates, the following terms have the following meanings.</p>	<p>Note: only applicable parts of the federal provisions mentioned below are printed. Parts that are not applicable, such as definitions of terms that are not used, are not included. For the complete texts of the cited sections, please see the following webpage: <a href="http://www.state.me.us/dep/blwq/topic/vessel/cruiseship/federal.htm">http://www.state.me.us/dep/blwq/topic/vessel/cruiseship/federal.htm</a></p>

Supplementary material, Chapter 532, Large Commercial Passenger Vessels

<p>NOTE: The following terms are defined in statute at 38 M.R.S.A. 423-D(1): "blackwater", "coastal waters", "commercial passenger vessel", "graywater", "large commercial passenger vessel", "no-discharge zone" and "small commercial passenger vessel".</p>	<p>Title 33, Subpart E--Discharge of Effluents in Certain Alaskan Waters by Cruise Vessel Operations  159.305 (excepts):  Sec. 159.305 Definitions. In this subpart:</p>
<p><b>A. Department.</b> Maine Department of Environmental Protection (department).</p> <p><b>B. Conventional pollutants.</b> The list of pollutants listed in 40 CFR 401.16 and 06-096 CMR 525(4)(VII).<sup>i</sup></p> <p><b>C. Discharge.</b> A release, however caused, from a commercial passenger vessel, and includes, any escape, disposal, spilling, leaking, pumping, emitting or emptying.</p> <p><b>D. Environmental compliance records.</b> Includes the Sewage and Graywater Discharge Record Book, all discharge reports, all discharge sampling test results, as well as any other records that must be kept under this chapter.</p> <p><b>E. Priority pollutant.</b> The list of toxic pollutants listed in 40 CFR 401.15 and 06-096 CMR 525(4)(VI).<sup>ii</sup></p>	<p>...</p> <p>Conventional Pollutants--means the list of pollutants listed in 40 CFR 401.16.</p> <p>Discharge--means a release, however caused, from a cruise vessel, and includes, any escape, disposal, spilling, leaking, pumping, emitting or emptying.</p> <p>...</p> <p>Environmental Compliance Records--includes the Sewage and Graywater Discharge Record Book, all discharge reports, all discharge sampling test results, as well as any other records that must be kept under this subpart.</p> <p>...</p> <p>Priority Pollutant--means the list of toxic pollutants listed in 40 CFR 401.15.</p> <p>Title 40, Part 33, Secondary Treatment Regulation</p>
<p><b>3. Effluent quality.</b> The discharge to coastal waters must satisfy the minimum level of effluent quality specified by the following secondary treatment standards. The following paragraphs describe the minimum level of effluent quality attainable by secondary treatment in terms of the parameters biochemical oxygen demand with a 5-day incubation period (BOD 5), suspended solids (SS) and pH. All requirements for each parameter in (A), (B) and (C) must be achieved.</p> <p><b>A. BOD, SS, and pH.</b></p>	<p>Sec. 133.102 Secondary treatment. The following paragraphs describe the minimum level of effluent quality attainable by secondary treatment in terms of the parameters-- BOD5, SS and pH. All requirements for each parameter shall be achieved <del>except as provided for in Secs. 133.103 and 133.105.</del><sup>iii</sup></p>

<p>(1) BOD 5 --</p> <p>(a) The 30-day average may not exceed 30 mg/l.</p> <p>(b) The 7-day average may not exceed 45 mg/l.</p> <p>(c) The 30-day average percent removal may not be less than 85 percent.</p> <p>(d) At the option of the department, in lieu of the parameter BOD 5 and the levels of the effluent quality specified in Section 3(A)(1)(a), (b) and (c), the parameter CBOD 5 (carbonaceous BOD 5) may be substituted with the following levels of the CBOD 5 effluent quality provided.</p> <p>(i) The 30-day average may not exceed 25 mg/l.</p> <p>(ii) The 7-day average may not exceed 40 mg/l.</p> <p>(iii) The 30-day average percent removal may not be less than 85 percent.</p> <p>(2) SS --</p> <p>(a) The 30-day average may not exceed 30 mg/l.</p> <p>(b) The 7-day average may not exceed 45 mg/l.</p> <p>(c) The 30-day average percent removal may not be less than 85 percent.</p> <p>(3) pH -- The effluent values for pH must be maintained within the limits of 6.0 to 9.0 unless the owner or operator demonstrates that inorganic chemicals are not added to the waste stream as</p>	<p>(a) BOD5.</p> <p>(1) The 30-day average shall not exceed 30 mg/l.</p> <p>(2) The 7-day average shall not exceed 45 mg/l.</p> <p>(3) The 30-day average percent removal shall not be less than 85 percent.</p> <p>(4) At the option of the NPDES permitting authority, in lieu of the parameter BOD5 and the levels of the effluent quality specified in paragraphs (a)(1), (a)(2) and (a)(3), the parameter CBOD5 may be substituted with the following levels of the CBOD5 effluent quality provided:</p> <p>(i) The 30-day average shall not exceed 25 mg/l.</p> <p>(ii) The 7-day average shall not exceed 40 mg/l.</p> <p>(iii) The 30-day average percent removal shall not be less than 85 percent.</p> <p>(b) SS.</p> <p>(1) The 30-day average shall not exceed 30 mg/l.</p> <p>(2) The 7-day average shall not exceed 45 mg/l.</p> <p>(3) The 30-day average percent removal shall not be less than 85 percent.</p> <p>(c) pH. The effluent values for pH shall be maintained within the limits of 6.0 to 9.0 unless the publicly owned treatment works demonstrates that:</p>
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<p>part of the treatment process.</p> <p><b>B. Fecal coliform.</b> The geometric mean of the samples from the discharge during any 30-day period does not exceed 20 fecal coliform/100 ml and not more than 10 percent of the samples exceed 40 fecal coliform/100 ml.</p> <p><b>C. Chlorine.</b> Concentrations of total residual chlorine may not exceed 10.0 mg/l.</p> <p><b>D. Test results.</b> Prior to any such discharge occurring, the owner, operator or master, or other person in charge of a large commercial passenger vessel, can demonstrate test results from at least five samples taken from the vessel representative of the effluent to be discharged, on different days over a 30-day period, conducted in accordance with the guidelines in 40 CFR Part 136 (Revised as of July 1, 2003), which confirm that the water quality of the effluents proposed for discharge is in compliance with subsections (A), (B), and (C). The owner, operator, master or other person in charge of a large commercial passenger vessel shall demonstrate continued compliance through periodic sampling. Such sampling and test results are considered environmental compliance records that must be made available upon request of the department.</p>	<p>(1) <del>i</del>Inorganic chemicals are not added to the waste stream as part of the treatment process; and</p> <p>(2) <del>contributions from industrial sources do not cause the pH of the effluent to be less than 6.0 or greater than 9.0.</del><sup>iv</sup></p> <p>114 STAT. 2763A–316 PUBLIC LAW 106–554—APPENDIX D, Sec. 1404(c)(2)</p> <p>(2) the geometric mean of the samples from the discharge during any 30-day period does not exceed 20 fecal coliform/100 ml and not more than 10 percent of the samples exceed 40 fecal coliform/100 ml;</p> <p>(3) concentrations of total residual chlorine may not exceed 10.0 g/l;<sup>v</sup> and</p> <p>(4) prior to any such discharge occurring, the owner, operator or master, or other person in charge of a cruise vessel, can demonstrate test results from at least five samples taken from the vessel representative of the effluent to be discharged, on different days over a 30-day period, conducted in accordance with the guidelines promulgated by the administrator in 40 CFR Part 136, which confirm that the water quality of the effluents proposed for discharge is in compliance with paragraphs (1), (2), and (3) of this subsection. <del>To the extent not otherwise being done by the owner, operator, master or other person in charge of a cruise vessel pursuant to section 1406,</del><sup>vi</sup> the owner, operator, master or other person in charge of a cruise vessel shall demonstrate continued compliance through periodic sampling. Such sampling and test results shall be considered environmental compliance records that must be made available for <u>upon request of the department inspection</u> <del>pursuant to section 1406(d) of this title.</del><sup>vii</sup></p> <p>33 CFR 159.315.</p>
<p><b>4. Sewage and Graywater Discharge Record</b></p>	<p>Sewage and graywater discharge record book</p>

**Book.** While operating in Maine coastal waters each large commercial passenger vessel must maintain, in English, a legible Sewage and Graywater Discharge Record Book with the vessel's name and official number listed on the front cover and at the top of each page.

**A. When entries are made.** Entries must be made in the Sewage and Graywater Discharge Record Book whenever any of the following is released into the coastal waters of Maine: (1) treated or untreated sewage; (2) graywater; or (3) sewage and graywater mixture.

**B. Content of entries.** Each entry in the Sewage and Graywater Discharge Record Book must, at a minimum, contain the following information:

- (1) Name and location of each discharge port within the ship;
- (2) Date the start of discharge occurred;
- (3) Whether the effluent is treated or untreated sewage, graywater, or a sewage and graywater mixture and type of treatment used;
- (4) Time discharge port is opened;
- (5) Vessel's latitude and longitude or universal transverse mercator coordinates at the time the discharge port is opened;
- (6) Volume discharged in cubic meters;
- (7) Flow rate of discharge in liters per minute;
- (8) Time discharge port is secured;
- (9) Vessel's latitude and longitude or universal transverse mercator (UTM) at the time the discharge port is secured; and

(a) While operating in the applicable waters of Alaska each cruise vessel shall maintain, in English, a legible Sewage and Graywater Discharge Record Book with the vessel's name and official number listed on the front cover and at the top of each page.

(b) Entries shall be made in the Sewage and Graywater Discharge Record Book whenever any of the following is released into the applicable waters of Alaska: (1) Treated or untreated sewage; (2) Graywater; or (3) Sewage and graywater mixture.

(c) Each entry in the Sewage and Graywater Discharge Record Book shall, at a minimum, contain the following information:

- (1) Name and location of each discharge port within the ship;
- (2) Date the start of discharge occurred;
- (3) Whether the effluent is treated or untreated sewage, graywater, or a sewage and graywater mixture and type of treatment used;
- (4) Time discharge port is opened;
- (5) Vessel's latitude and longitude or universal transverse mercator coordinates<sup>viii</sup> at the time the discharge port is opened;
- (6) Volume discharged in cubic meters;
- (7) Flow rate of discharge in liters per minute;
- (8) Time discharge port is secured;
- (9) Vessel's latitude and longitude or universal transverse mercator (UTM) at the time the discharge port is secured; and

<p>(10) Vessel's minimum speed during discharge.</p> <p><b>C. Statement concerning emergency, accidental or exceptional discharge.</b> In the event of an emergency, accidental or other exceptional discharge of sewage or graywater, a statement must be made in the Sewage and Graywater Discharge Record Book of the circumstances and reasons for the discharge and an immediate notification of the discharge must be made to department.</p> <hr/> <p>NOTE: Discharges of blackwater or graywater from a large commercial passenger vessel to coastal waters must be reported to the department as provided in 38 M.R.S.A. 423-D(3).</p> <hr/> <p><b>D. Date and sign.</b> Each entry of a discharge must be recorded without delay and signed and dated by the person or persons in charge of the discharge concerned and each completed page must be signed and dated by the master or other person having charge of the ship.</p> <p><b>E. Location.</b> The Sewage and Graywater Discharge Record Book must be kept in such a place as to be readily available for inspection at all reasonable times and must be kept on board the ship.</p> <p><b>F. Maintenance responsibility.</b> The master or other person having charge of a ship required to keep a Sewage and Graywater Discharge Record Book is responsible for the maintenance of such record.</p> <p><b>G. Time period.</b> The Sewage and Graywater Discharge Record Book must be maintained on board for not less than three years.</p> <p><b>4. Sampling and reporting</b></p>	<p>(10) Vessel's minimum speed during discharge.</p> <p>(d) In the event of an emergency, accidental or other exceptional discharge of sewage or graywater, a statement shall be made in the Sewage and Graywater Discharge Record Book of the circumstances and reasons for the discharge and an immediate notification of the discharge shall be made to the COTP.</p> <p>(e) Each entry of a discharge shall be recorded without delay and signed and dated by the person or persons in charge of the discharge concerned and each completed page shall be signed and dated by the master or other person having charge of the ship.</p> <p>(f) The Sewage and Graywater Discharge Record Book shall be kept in such a place as to be readily available for inspection at all reasonable times and shall be kept on board the ship.</p> <p>(g) The master or other person having charge of a ship required to keep a Sewage and Graywater Discharge Record Book shall be responsible for the maintenance of such record.</p> <p>(h) The Sewage and Graywater Discharge Record Book shall be maintained on board for not less than three years.</p> <p>33 CFR 159.317  Sampling and reporting.</p>
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**A. Sampling.** The owner, operator, master or other person in charge of a large commercial passenger vessel that discharges graywater or a mixture of blackwater and graywater in the coastal waters of Maine shall:

- (1) Not less than 90 days prior to each vessel's initial entry into the coastal waters of Maine during any calendar year, provide to the department certification of participation under a Quality Assurance/Quality Control Plan (QA/QCP) accepted by the department for sampling and analysis of graywater or a mixture of graywater and blackwater for the current operating season;
- (2) Not less than 30 days nor more than 120 days prior to each vessel's initial entry into the coastal waters of Maine during any calendar year, provide a certification to the department that the vessel's treated sewage and graywater effluents meet the minimum standards established in Section 3;
- (3) Within 30 days of each vessel's initial entry into coastal waters of Maine during any calendar year, provide to the department a Vessel Specific Sampling Plan (VSSP) for review and acceptance, and undergo sampling and testing for conventional pollutants of all treated sewage and graywater effluents as directed by the department;
- (4) While operating in the coastal waters of Maine be subject to unannounced sampling of graywater discharge effluents, or combined treated sewage/graywater discharge effluents for the purpose of testing for a limited suite, as determined by the department, of priority pollutants;
- (5) While operating in coastal waters of Maine be subject to additional random sampling events, in addition to all other

(a) The owner, operator, master or other person in charge of a cruise vessel that ~~discharges treated sewage and/or graywater~~ graywater or a mixture of blackwater and graywater<sup>ix</sup> in the applicable waters of Alaska shall;

(1) Not less than 90 days prior to each vessel's initial entry into the applicable waters of Alaska during any calendar year, provide to the COTP certification of participation under a Quality Assurance/Quality Control Plan (QA/QCP) accepted by the COTP for sampling and analysis of treated sewage and/or graywater for the current operating season;

(2) Not less than 30 days nor more than 120 days prior to each vessel's initial entry into the applicable waters of Alaska during any calendar year, provide a certification to the COTP that the vessel's treated sewage and graywater effluents meet the minimum standards ~~by the Administrator, or in the absence of such standards, meet the minimum established in Section 3~~ Sec. 159.319 of this subpart.<sup>x</sup>

(3) Within 30 days of each vessel's initial entry into the applicable waters of Alaska during any calendar year, provide to the COTP a Vessel Specific Sampling Plan (VSSP) for review and acceptance, and undergo sampling and testing for conventional pollutants of all treated sewage and graywater effluents as directed by the COTP;

(4) While operating in the applicable waters of Alaska be subject to unannounced sampling of treated ~~sewage and~~ graywater discharge effluents, or combined treated sewage/graywater discharge effluents for the purpose of testing for a limited suite, as determined by the Coast Guard, of priority pollutants;

(5) While operating in the applicable waters of Alaska be subject to additional random sampling events, in addition to all other required

<p>required sampling, of some or all treated sewage and graywater discharge effluents for conventional and/or priority pollutant testing as directed by the department;</p> <p>(6) Ensure all samples, as required by this section, are collected and tested by a laboratory accepted by the department for the testing of conventional and priority pollutants, as defined by this subpart, and in accordance with the large commercial passenger vessel's department accepted QA/QCP and VSSP; and</p> <p>(7) Pay all costs associated with development of an acceptable QA/QCP and VSSP, sampling and testing of effluents, reporting of results, and any additional environmental record keeping as required by this chapter, not to include cost of state regulatory oversight.</p> <p><b>B. Quality Assurance/Quality Control Plan (QA/QCP).</b> A QA/QCP must, at a minimum include:</p> <p>(1) Sampling techniques and equipment, sampling preservation methods and holding times, and transportation protocols, including chain of custody;</p> <p>(2) Laboratory analytical information including methods used, calibration, detection limits, and the laboratory's internal QA/QC procedures;</p> <p>(3) Quality assurance audits used to determine the effectiveness of the QA program; and</p> <p>(4) Procedures and deliverables for data validation used to assess data precision and accuracy, the representative nature of the samples drawn, comparability, and completeness of measure parameters.</p>	<p>sampling, of some or all treated sewage and graywater discharge effluents for conventional and/or priority pollutant testing as directed by the COTP;</p> <p>(6) Ensure all samples, as required by this section, are collected and tested by a laboratory accepted by the Coast Guard for the testing of conventional and priority pollutants, as defined by this subpart, and in accordance with the cruise vessel's Coast Guard accepted QA/QCP and VSSP;</p> <p>(7) Pay all costs associated with development of an acceptable QA/ QCP and VSSP, sampling and testing of effluents, reporting of results, and any additional environmental record keeping as required by this subpart, not to include cost of federal regulatory oversight.</p> <p>(b) A QA/QCP must, at a minimum include:</p> <p>(1) Sampling techniques and equipment, sampling preservation methods and holding times, and transportation protocols, including chain of custody;</p> <p>(2) Laboratory analytical information including methods used, calibration, detection limits, and the laboratory's internal QA/QC procedures;</p> <p>(3) Quality assurance audits used to determine the effectiveness of the QA program; and</p> <p>(4) Procedures and deliverables for data validation used to assess data precision and accuracy, the representative nature of the samples drawn, comparability, and completeness of measure parameters.</p>
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<p><b>C. Vessel Specific Sampling Plan (VSSP).</b> A VSSP is a working document used during the sampling events required under this section and must, at a minimum, include:</p> <ul style="list-style-type: none"> <li>(1) Vessel name;</li> <li>(2) Passenger and crew capacity of the vessel;</li> <li>(3) Daily water use of the vessel;</li> <li>(4) Holding tank capacities for treated sewage and graywater;</li> <li>(5) Vessel schematic of discharge ports and corresponding sampling ports;</li> <li>(6) Description of discharges; and</li> <li>(7) A table documenting the type of discharge, type of sample drawn (grab or composite), parameters to test for (conventional or priority pollutants), vessel location when sample drawn, date and time of the sampling event.</li> </ul> <p><b>D. Submission of test results.</b> Test results for conventional pollutants must be submitted within 15 calendar days of the date the sample was collected, and for priority pollutants within 30 calendar days of the date the sample was collected, to the department directly by the laboratory conducting the testing and in accordance with the department accepted QA/QCP.</p> <p><b>E. Retention of samples.</b> Samples collected for analysis under this subpart must be held by the laboratory contracted to do the analysis for not less than six months, or as directed by the department.</p> <p><b>E. Form of reports.</b> Reports required under this section may be written or electronic. If electronic, the reports must be in a format readable by department data systems.</p>	<p>(c) A VSSP is a working document used during the sampling events required under this section and must, at a minimum, include:</p> <ul style="list-style-type: none"> <li>(1) Vessel name;</li> <li>(2) Passenger and crew capacity of the vessel;</li> <li>(3) Daily water use of the vessel;</li> <li>(4) Holding tank capacities for treated sewage and graywater;</li> <li>(5) Vessel schematic of discharge ports and corresponding sampling ports;</li> <li>(6) Description of discharges; and</li> <li>(7) A table documenting the type of discharge, type of sample drawn (grab or composite), parameters to test for (conventional or priority pollutants), vessel location when sample drawn, date and time of the sampling event.</li> </ul> <p>(d) Test results for conventional pollutants shall be submitted within 15 calendar days of the date the sample was collected, and for priority pollutants within 30 calendar days of the date the sample was collected, to the COTP directly by the laboratory conducting the testing and in accordance with the Coast Guard accepted QA/QCP.</p> <p>(e) Samples collected for analysis under this subpart shall be held by the laboratory contracted to do the analysis for not less than six months, or as directed by the COTP.</p> <p>(f) Reports required under this section may be written or electronic. If electronic, the reports must be in a format readable by Coast Guard and Alaska Department of Environmental Conservation data systems.</p>
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<sup>i</sup> A cross-reference is added in the draft rule to the section of DEP rules that contains the list of conventional pollutants. The list in DEP's rules is drawn from the federal rule.

<sup>ii</sup> A cross-reference is added to the section of DEP rules containing this list. The list is drawn from the federal rule.

<sup>iii</sup> See links on the website for texts of 133.103 and 133.105. These provisions address situations that are not applicable to vessels: combined sewers, industrial waste, and waste stabilization ponds. Therefore, the text was not included in the draft rule.

<sup>iv</sup> The limitation concerning contributions from industrial sources is not applicable to a waste treatment system on a commercial passenger vessel.

<sup>v</sup> See original federal document. The text includes a symbol that would not transfer to Microsoft Word; the symbol appears to be a typographical error.

<sup>vi</sup> Sec. 1406 "Inspection and Sampling Regime" are provisions of federal law that apply in Alaskan coastal waters, but not in Maine's coastal waters. Therefore, this provision was not included in the draft rule.

<sup>vii</sup> 1406(d) is not applicable.

<sup>viii</sup> The text added to the draft rule by the department gives a vessel the option of providing universal transverse mercator (UTM) information rather than latitude and longitude. It does not require UTM.

<sup>ix</sup> This change was made to exclude a sampling requirement if only treated sewage is being discharged. The state provisions (ch. 650) would not require coverage under the general permit in that case, and the standards under the general permit would not apply.

<sup>x</sup> The text that requires a large commercial passenger vessel to certify that they are complying with standards in Sec. 159.319 is changed to refer to the standards in Section 3 of the draft rule. Sec. 159.319 is the fecal coliform and total suspended solids standard for marine sanitation devices (MSDs). Ch. 650, sec. 2, in text to be codified at 38 MRSA 423-D(4)(B)(3) specifically provides that, instead of the standard referenced in 159.317(a)(2), which refers over to Sec. 159.319, large commercial passenger vessels must certify that they are meeting the standard in federal Consolidated Appropriations Act of 2001, Public Law 106-554, [Section 1\(a\)\(4\)](#) and [Appendix D](#), Division B, Title XIV, Section 1404(b) or (c), 114 Stat. 2763, 2763A-316. This is the secondary treatment standard that is set out in the rule in Section 3 and, when applied to vessels, is commonly referred to as the "continuous discharge standard".

The text concerning meeting standards adopted by the Administrator was removed because a state agency may not adopt standards by reference that do not yet exist but may in the future.